

Approved For Release 2006/11/13 : CIA-RDP80M00165A000800070001-9

577-776513

24 June 1977

E-1.2.1

MEMORANDUM FOR: Deputy Director for Intelligence [REDACTED]
THROUGH : Acting Director, Center for Policy Support
FROM : Coordinator for Academic Relations and
External Analytical Support
SUBJECT : CIA and the International Studies Association

STAT

1. Recently I met with Professor Llewelyn Howell of American University and local arrangements chairman of the International Studies Association for its 1978 convention in Washington. As you know from my 18 May memo to you, Howell is anxious to complete arrangements for a large number of members of the association to visit CIA and to be briefed by Admiral Turner. Prior to my meeting with Howell, I had received assurances from Mr. Hetu that Admiral Turner would be prepared to appear before an ISA audience in the Headquarters auditorium.

2. At our luncheon meeting Howell and I agreed on most of the details for an ISA group to visit the Agency. The convention program which will be mailed late this year to all association members will include details of the planned visit. Once registered at the convention and having paid a \$25 fee, members will be able to sign up for the Agency visit. ISA will provide its own transportation and will ticket as many members who can be accommodated in the Agency auditorium.

3. The visit is scheduled for Saturday morning, 25 February. Howell and I agreed tentatively that prior to Admiral Turner's presentation to the visitors it would be appropriate for three or four senior officials, representing different sectors of the Agency, to make brief presentations and to answer questions. This segment might best be handled informally as a panel. Admiral Turner's hour-long presentation and a question-and-answer session would follow,

EXECUTIVE REGISTRY FILE

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and then the visitors would be permitted to view unclassified exhibits or displays that may by that time be available in the main lobby.

4. Howell and I have agreed on these arrangements, pending ratification by appropriate senior officials of ISA and CIA. Howell has no doubt that ISA will endorse his efforts. We have agreed to consult again in September so that I can provide him with precise language about the Agency visit for use in the ISA newsletter. I will, of course, continue to report on this as further arrangements are made.

STAT



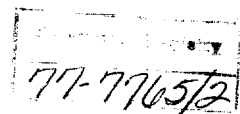
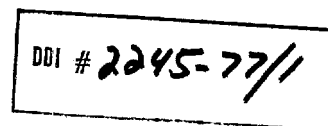
cc: Mr. Hetu, ADCI/PA



STAT



Washington, D.C. 20505



22 JUN 1977

Professor Herbert Kelman
President, International
Studies Association
Department of Social Relations
William James Hall
Harvard University
Cambridge, Massachusetts 02138

Dear Professor Kelman,

I was gratified to learn that the International Studies Association Governing Council has decided that qualified members from the Central Intelligence Agency will continue to have the opportunity to participate in ISA meetings. Our analysts who took part in your March meeting in St. Louis found it professionally stimulating and beneficial.

I am looking forward to the possibility of addressing interested ISA members during your next annual convention in Washington. I understand that Dr. Howell of your program committee and our Academic Coordinator have made preliminary arrangements for me to do so on Saturday morning, February 25.

Yours sincerely,

/s/ Stansfield Turner

STANSFIELD TURNER



Subject: Letter to Professor Herbert Kelman, Harvard University
Possibility of addressing annual ISA convention in Washington
February 25, 1978.

Distribution:

Original - Addressee

- 1 - DCI
- 1 - DDCI
- 1 - ER ✓
- 1 - DDI
- 2 - AD/CPS
- 1 - CPS/CAR

STAT DDI/CPS/CAR (14 June 1977)

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EXECUTIVE SECRETARIAT

Routing Slip

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		SUSPENSE 8 June 1977			
		Date			

Remarks:

The attached extract from the Morning Meeting Minutes of 27 May were seen by the DCI who added in the margin his desire that he'd like to write the ISA. Please prepare response for his signature.

Executive Secretary

31 May 77

Date

3637 (7-76)

STAT

CONFIDENTIAL

2245-77

DDI
31 May 1977

Extract from Morning Meeting Minutes of 27 May 1977:

25X1

[redacted] reported on the short-lived coup attempt in Angola, which appears to be settled now; [redacted]

[redacted] and two non-substantive matters:

-- A rump faction of the International Studies Association has protested further CIA participation in its conferences. We had a number of people participate in the Easter meeting. They were well received and papers they presented are being published. The organization's governing council has ruled that it finds no grounds to bar CIA participation under standing rules that they identify themselves as CIA. It was explained that this organization is an offshoot of the American Political Science Association devoted to international affairs.

*get letters
write governing
council - ask
them - press
press for
interest in ISA*

VNC

FOI
BY B1

CONFIDENTIAL

25X1

SENDER WILL CHECK CLASSIFICATION TOP AND BOTTOM

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OFFICIAL ROUTING SLIP

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<input type="checkbox"/> COMMENT	<input type="checkbox"/> FILE	<input type="checkbox"/> RETURN
<input type="checkbox"/> CONCURRENCE	1-3 <input type="checkbox"/> INFORMATION	4 <input type="checkbox"/> SIGNATURE

Remarks: 4:

Per your request, letter to Herbert Kelman, President, International Studies Association, regarding CIA participation in 1978 and future ISA annual meetings. [REDACTED] Academic Coordinator, worked with Herb Hetu on the arrangements for you to speak on 25 February.

[REDACTED]

Sayre Stevens

FOLD HERE TO RETURN TO SENDER

FROM: NAME, ADDRESS AND PHONE NO.

DATE

6/14/77

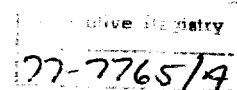
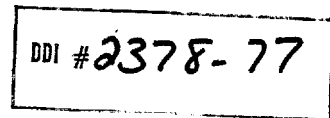
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FORM NO. 1-67 237 Use previous editions

(40)



Washington, D.C. 20505



JUN 1977

Mr. Thomas M. Stauffer
American Council on Education
One Dupont Circle
Washington, D.C. 20036

Dear Mr. Stauffer,

Thank you for your invitation for Agency participation in the next annual meeting of the International Studies Association. Our Academic Coordinator has been in touch with Dr. Howell of your program committee, and our analysts have been encouraged to submit panel proposals.

Preliminary arrangements have also been made for me to address interested ISA members in the CIA auditorium on Saturday morning, February 25. I am very much looking forward to that session.

Yours sincerely,

/s/ Stansfield Turner

STANSFIELD TURNER

Subject: Letter to Mr. Thomas M. Stauffer, American Council on
Education
Agency participation in annual ISA convention, February 25, 1978.

Distribution:

Original - Addressee

- 1 - DCI
- 1 - DDCI
- 1 - ER ✓
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STAT DDI/CPS/CAR: (14 June 1977)

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
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SUSPENSE 13 June 1977
Date

Remarks: Please coordinate and submit recommendation to DCI via DDCI on whether our participation is desirable, including response for DCI signature. Note 1 July deadline for proposals. DCI response might include proposals or say will come later and designate contact point. STAT

 Executive Secretary
1 June 77
Date

3637 (5-77)

EXECUTIVE SECRETARIAT

Routing Slip

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Executive Registry

77-7265/1

I'm enthusiastic - even willing to speak if asked - also want to thank Board of ISA for rejecting official by one of their people to join ISA

SUSPENSE

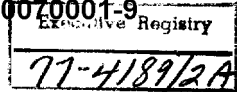
STAT

Executive Secretary

Date

3637 (5-77)

Central Intelligence Agency



Washington, D.C. 20505

1 JUN 1977

Professor Marshall I. Goldman
Associate Director
Russian Research Center
Harvard University
Cambridge, Massachusetts 02138

Dear Professor Goldman:

I greatly appreciate your letter and detailed observations on our Soviet oil projections.

We are in agreement that the Communist countries will try hard to avoid imports of 3.5 to 4.5 million b/d in the 1980s. Our study describes the magnitude of the problem if present policies continue. We are now working on the implications of our projections, i.e. what options do the Soviets have and what would be the cost of their economy of exercising these options. We expect to have the issues sorted out by 22 June, when I am scheduled to brief the Joint Economic Committee. I propose to send you an unclassified copy of my testimony shortly thereafter.

Your comments on page four of the critique are well taken. Certainly the CIA, along with other observers of Soviet oil affairs, failed to predict the increase in Soviet oil exports in the mid-1970s. The fact that the Soviets chose to make such increases, however, is central to our argument. Their very success in increasing output, as well as a slowdown in domestic demand, are the causes of their problem, because such increases in output are made by shifting resources out of exploration into production and by overproducing existing fields. The faster the Soviets produce in response to hard-currency needs or for other reasons, the sooner the downturn will come. It should also be pointed out that, even with the

~~EXECUTIVE~~ REGISTRY FILE E-1.2.1

incentive of high world oil prices and the need for hard currency, the Soviets have fallen short of their planned production goals during four of the past five years.

With regard to reserves, I think you will agree that the ultimate reserve base is largely irrelevant in projecting Soviet output in the early 1980s. In order to avoid a downturn in production the Soviet's must discover and bring into production in the next few years new super-giant fields like Samotlor and Romashkino. This is very unlikely.

With regard to alternate sources of energy, we would certainly agree that such sources exist and that the Soviets will try to exploit them. We doubt, however, that these sources can come on stream rapidly enough to more than marginally alter the situation in the timeframe of our study. An acceleration of alternate energy development would require a shift of resources -- including imported equipment and technology paid for with scarce foreign exchange -- from other areas of the economy. This would come at a time when the petroleum industry itself will be requiring ever increasing amounts of the same resources. Frankly, we don't see how the Soviets can do it by 1985. Alternate sources of energy will, of course, come into much greater use in the late-1980s and the 1990s; by that time, however, we expect oil production will have long since peaked and declined.

We see the same type of problem with regard to increasing oil output from new areas; it just can't be done by 1985. Indeed, we do not see many signs that the Soviets are actually attempting to find and develop new fields on a crash basis. Rather, until recently at least, they were moving resources out of exploration into development drilling in order to increase output in the short run. As you have pointed out, the Soviets have purchased large amounts of Western oil technology and will undoubtedly accelerate such purchases in the future. Given, however, that many major items of equipment are in short supply in the West and that annual production of such equipment is relatively small, we see no possibility that the Soviets can obtain the amount of equipment needed between now and 1985. The amounts required are staggering.

When I declassified our study of Soviet oil prospects, I was curious to see the Soviet reaction. Frankly, I had expected our paper to be denounced as a "CIA trick." Nothing of the sort has happened. The Soviet response has been defensive. Spokesmen have generally admitted that the Russian oil industry has serious problems but stressed that solutions could be found. Interestingly enough, one of the "solutions" mentioned by a Soviet official was to increase imports of "cheap" Middle Eastern oil rather than produce "expensive" Russian oil. The man has a point; in the short term, the foreign exchange costs of finding, developing, producing, and transporting Soviet oil could exceed the foreign exchange costs of importing OPEC crude.

I am enclosing two memoranda with this letter. One is our response to a number of questions raised by another thoughtful recipient of the two papers. The other is an in-house working paper on the Soviet reserve question. I would appreciate your treating the reserve memorandum confidentially. In about a month I plan to issue an unclassified paper detailing much of the research that was behind our report.

Finally, I am pleased that you were able to accept my 9 June luncheon invitation extended by [REDACTED] A very small group of prominent experts will comment on our two energy papers at that time. I hope that you can arrive by mid-morning to be briefed by our analysts and stay after lunch for further substantive discussions.

STAT

Yours,

/s/ Stansfield Turner

STANSFIELD TURNER

Enclosures:
as stated

DCI letter to Professor Marshall I. Goldman, Harvard
Research Center

CONCUR:

[Redacted Signature Box]

Deputy Director for Intelligence

20 MAY 1977

Date

Response to Comments on CIA Energy Reports

We fully appreciate the problems in forecasting a number of variables nearly a decade ahead. We also recognize that there are special difficulties in projecting demand for OPEC oil which of course is a residual calculated from estimates of non-OPEC energy demand and supply. These are difficulties which are present in all forecasting. On balance, however, the procedures we used tend to bias our estimates in the side of being too optimistic regarding the size of the oil shortfall. This notwithstanding, the press reports we are too pessimistic.

Estimating demand for energy is complicated because it largely depends on rates of economic growth in major consuming countries. Most long-term forecasters are in agreement that economic expansion during the period through 1985 will be appreciably slower than during the pre-1973 period. Our estimates of economic growth rates are close to the consensus view, but in all cases are somewhat lower. Our projected savings from conservation, on the other hand, are somewhat higher. On both counts, then, our demand estimates are likely to prove too low rather than too high.

CIA/OER

On the question of non-OPEC energy supplies we tried to minimize the estimating problem by selecting 1985 as the terminal point in our research. This is important because the lead times for bringing new energy resources on stream are fairly well defined. For the most part, supplies not already being developed will simply not be available before 1985. Given the lead time problem, which was highlighted in the recently completed MIT energy study, we are very confident that the quantities actually available between now and 1985 will fall within the ranges we have estimated.

Forecasting oil production of most OPEC countries is not really difficult. Most are constrained by their reserve base and other elements over which government policies have no control. The fuzziness comes in predicting output of those countries with reserves that could support large production increases such as Saudi Arabia and Kuwait. In both instances, however, we used supply projections that are clearly a maximum. In the case of Kuwait, we put 1985 production at 3 million b/d even though the government wants to limit production to only 2 million b/d. Our Saudi projection of 18 million b/d presumes an all out effort to expand output that in fact is not now planned.

With respect to tertiary recovery it is true that these techniques will result in more oil being produced from the reserve base. The impact, however, will not be to increase production in the short run but rather to get more oil out of the ground in the long run. In the United States an average of only 32% of the oil in place is extracted with current primary and secondary operations. National goals recently set by the Energy Research and Development Agency call for raising the recovery rate over the next quarter century to between 34.5% and 38%, an increase of only 2.5 to 6 percentage points. At present only a few pilot programs are operating and most of these are in the United States.

In analyzing Free World energy supply and demand, the bulk of data we use is available to the public. Drawing on this data, we expect that others doing similar work would reach conclusions similar to ours. The MIT group in fact did, even though a different methodology was used. In the case of Communist countries we use large amounts of unclassified data from their technical journals. but we also draw on information not generally available and therefore cannot be as forthcoming in public discussion as we would like. Although this unique information enables us to be

more assertive in our Soviet oil forecast, others working with just the open literature would reach conclusions similar to ours. I would recommend Robert Campbell's excellent work on the Soviet oil industry as well worth reading--both volumes.

Concerning our report on the prospects for Soviet oil production, the Soviet response that I can tell you about has been surprising. They have not been bombastic as might have been expected. Rather they have tended to substantiate our analysis that the problems they face are widespread and serious. The essential difference is that the Soviets are optimistic that they can solve their problems while we are not. In reaching this conclusion, we of course have considered the effect of changes in Soviet policy as well as the potential impact of additional Western technology and assistance. But these factors will do little except possibly slow the rate of the production decline once it begins. It should be noted that despite the quadrupling in prices and access to the most advanced technology, US oil production has declined 16% since peaking in 1970. Alaska will only halt the decline for about 2 years.

The following specific comments will help clarify questions you raised on each of the two energy reports. The following remarks address the points regarding the international energy outlook.

- o Our energy demand estimates for major consuming countries draw on two factors (a) rates of economic growth and (b) the effect of conservation measures in place. The 10%-15% energy saving we assumed therefore result from past price increases and conservation measures in effect as of first quarter 1977. We made no attempt to estimate the impact on demand of subsequent policy changes. This would include measures that come out of the energy bill now before Congress.
- o In preparing our energy demand estimate we used both the smoothed Four Year GNP equation plus an adjustment for conservation in the period after 1973. We of course continue to make the conservation adjustment through 1985 as indicated in Table 2. If this methodology were used to predict energy demand in 1976, it would have yielded results almost identical to actual energy demand. As for the sensitivity to economic growth, each half percentage point increase or decrease in the yearly rate of growth over the entire period through 1985 would change our 1985 consumption figure by at most 4 million b/d.
- o There is no inconsistency in the estimate that oil production in selected non-OPEC LDCs will increase while Soviet production will eventually peak and decline. Our LDC projections are based on an assessment of such factors as government exploration and development policy, the adequacy of the energy reserve base and the lead time necessary to bring projects on line. The analysis on the USSR was done quite separately.

The following notes address the specific questions you had concerning prospects for Soviet oil production. On the question of Soviet oil reserves we are preparing an unclassified monograph which should be available in about a month.

- o It is well known that the Soviets make less efficient use of their resources--land, labor, and capital--than any other major industrial country. In the area of forestry, for example, they have denuded vast areas with little or no provision for replanting or erosion control. In energy they are wasteful with a vengeance in large part because of the techniques they use. Even Soviet engineers are aware of this; they are also aware of the more efficient techniques used in the West. Adopting them is difficult if not impossible, however, since the pressure they face is to meet plan goals. As a result, they get more oil out not, but less over time. Instead of the 32% yield we get, the Soviet State Planning Agency puts Soviet recovery at only about 25% of the oil in the ground.
- o We agree that the Soviets could reverse their present emphasis on production over exploration and the Soviets are aware of this. So far, however, we have no evidence suggesting such a shift is in sight. In fact, we expect that pressures in the opposite direction will intensify as output falls increasingly below plan targets. In any event, the Soviets have not increased their exploratory drilling in the past fifteen years. All of the new drilling rigs have been allocated to drilling wells in known pools to boost immediate output. Any shift to exploration would entail drilling fewer production wells and an immediate fall-off in current output.

- o We examined the possibility of tertiary recovery in the Soviet Union during the time period of our analysis. The prospects of it having any more than an insignificant impact are negligible. For one thing, Soviet practices make it difficult to implement tertiary recovery procedures. This is because their massive water flood techniques adversely affect the oil reservoir permeability. Given the widespread damage inflicted on major oil reservoirs the Soviets will have a hard time getting a much larger share of their oil out of the ground than they do now. If the US is any example, the Soviets might be able to increase recovery rates a few percentage points over the long term with tertiary methods. Even accomplishing this will be difficult, however, since Soviet oil technology--especially tertiary techniques--lags well behind US technology.
- o New capacity requirements are driven by the pace at which the Soviets are depleting their oil fields. We agree that new capacity requirements are controlled by policy decisions in the sense that the Soviets could choose to produce less now thereby reducing replacement needs. Holding down production at this point, however, would mean a reduction in what is made available to Eastern Europe and the West. In the short-run at least the Soviets would be hard pressed to limit domestic demand without adversely affecting real economic growth.
- o The Soviets have known for some time that they have a drilling problem. Indeed the cutback in exploratory drilling reflects their awareness of the problem. To ease the situation they could in theory purchase more rigs in the West if they were available. The number of new rigs produced annually, however, has been remarkably stable and generally devoted to replacing old ones. There is in fact very little excess rig capacity. But even if the Soviets were somehow able to buy them they would face serious equipment problems since Soviet drilling techniques are much different than in the West. In any event, the Soviet record on integrating Western technology is not very good.

The Soviets of course could help their oil situation by permitting large numbers of foreign nationals to work major oil fields. Despite growing Soviet appreciation of their problem and willingness over the past 4-5 years to spend several billion dollars on oil field equipment, they have not allowed such foreign activity. Nor have they even been willing to provide sufficient data on their oil fields so as to make optimum purchases of equipment.

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HARVARD UNIVERSITY
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RUSSIAN RESEARCH CENTER

77-4189/2

DBI # 2064-77

EDWARD L. KEENAN, Director

MARSHALL I. GOLDMAN, Associate Director

VLADIMIR I. TOUMANOFF, Associate Director

10 May 1977

ARCHIBALD CARY COOLIDGE HALL
1737 CAMBRIDGE STREET
CAMBRIDGE, MASSACHUSETTS 02138
(617) 495-4037

STAT

Admiral Stansfield Turner
Director
Central Intelligence Agency
Washington, D.C. 20505

STAT

Dear Admiral Turner:

Thank you very much for your thoughtful letter. I must say I had not expected to hear from the director of the Central Intelligence Agency but I was delighted that you were interested in the problem.

I have enclosed a somewhat longer analysis of the two reports. Naturally I would welcome any comments that anyone has about them.

I should say that I have had several discussions with manufacturers of American oil producing equipment. They all suggest that the sale of their technology which has been an ongoing operation will indeed make it possible for the Soviets to overcome many of their operating problems. That should make it possible for the Soviets to continue to develop their petroleum reserves not only in permafrost areas, but in offshore deposits.

I suspect my major concern, however, as an economist is that without the money to pay for the oil, the Soviets simply cannot become a major importer. Consequently it does no good to suggest that the Soviets would like to import the oil if they are unable to pay for it. Moreover, I would agree that Saudi Arabia and some of the other OPEC countries will be unwilling to supply that much, but then the Soviets will not become a major factor in the import market. In other words, a critical assumption in the CIA reports is that the Soviet Union will be buying from 3.5 to 4.5 million barrels a day. It does not bother me that they would like to do this. What is important is can they afford to do it. I do think that the attraction of the high world price and their inability to pay for what they would like to buy will force them to move rapidly to domestic conservation both at home and in Eastern Europe. Since they have remarkably large quantities of natural gas and large quantities of coal, that should not be too difficult for them. Certainly it should be no more difficult for them than it will be for us.

My New York Times article left off the last couple of sentences. Those sentences reaffirm the fact that I think the overall

111-157

-2-

Admiral Stansfield Turner

10 May 1977

conclusions that we, the United States and the rest of the world will be severely short of petroleum is a correct analysis. What I was worried about was that by pushing the date up to 1985, that would cause a loss of creditability, particularly because the American public is skeptical of the whole situation. I think in trying to indicate that there was a short-run problem, we may very well have lost support for conservation for the longer haul.

Sincerely yours,



Marshall I. Goldman

MIG:rdh

79064-77/1

MEMORANDUM FOR: The Director

Attached is a response to Professor
Marshall Goldman's 10 May letter to you.

[Redacted]

Sayre Stevens
DDI

Date 26 MAY 1977

FORM 5-75 101 USE PREVIOUS EDITIONS

STAT

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OD/OER

[Redacted]

(24 May '77)

STAT

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TRANSMITTAL SLIP		DATE
TO: <i>DDI</i>		
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18 MAY 1977		Executive Registry <i>77-4189/3</i>
<p><i>See DDI notes & incorporate as appropriate in response</i></p> <p>STAT <i>18 May</i></p>		
FROM: <i>SA/Sec -</i>		
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REPLACES FORM 35-8
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SUSPENSE		25 May 1977 <small>Date</small>			

Remarks:

~~Please prepare analysis and response for~~
DCI signature.

[Signature]

177-4189/21

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RUSSIAN RESEARCH CENTER

EDWARD L. KEENAN, Director

MARSHALL I. GOLDMAN, Associate Director

VLADIMIR I. TOUMANOFF, Associate Director

10 May 1977

ARCHIBALD CARY COOLIDGE HALL
1737 CAMBRIDGE STREET
CAMBRIDGE, MASSACHUSETTS 02138
(617) 495-4037

STAT

Admiral Stansfield Turner
Director
Central Intelligence Agency
Washington, D.C. 20505

Dear Admiral Turner:

Thank you very much for your thoughtful letter. I must say I had not expected to hear from the director of the Central Intelligence Agency but I was delighted that you were interested in the problem.

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I should say that I have had several discussions with manufacturers of American oil producing equipment. They all suggest that the sale of their technology which has been an ongoing operation will indeed make it possible for the Soviets to overcome many of their operating problems. That should make it possible for the Soviets to continue to develop their petroleum reserves not only in permafrost areas, but in offshore deposits.

I suspect my major concern, however, as an economist is that without the money to pay for the oil, the Soviets simply cannot become a major importer. Consequently it does no good to suggest that the Soviets would like to import the oil if they are unable to pay for it. Moreover, I would agree that Saudi Arabia and some of the other OPEC countries will be unwilling to supply that much, but then the Soviets will not become a major factor in the import market. In other words, a critical assumption in the CIA reports is that the Soviet Union will be buying from 3.5 to 4.5 million barrels a day. It does not bother me that they would like to do this. What is important is can they afford to do it. I do think that the attraction of the high world price and their inability to pay for what they would like to buy will force them to move rapidly to domestic conservation both at home and in Eastern Europe. Since they have remarkably large quantities of natural gas and large quantities of coal, that should not be too difficult for them. Certainly it should be no more difficult for them than it will be for us.

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Admiral Stansfield Turner

10 May 1977

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Sincerely yours,



MIG:rdh

Marshall I. Goldman

SOME CRITICAL OBSERVATIONS ABOUT THE CIA
ANALYSIS OF THE NEED FOR SOVIET OIL IMPORTS

by

Marshall I. Goldman
Professor of Economics at Wellesley College
and
Associate Director of the Russian Research Center,
Harvard University

which served as the underpinning for President Carter's statement on the need for energy conservation.¹ While few would dispute the need for energy conservation, there is good reason to challenge the CIA's specific findings about the availability and demand for petroleum in the USSR.

The CIA argues that by 1985 the availability of world petroleum supplies will become decidedly more limited, because the "USSR will change from an exporter to a substantial importer of oil."² Whereas "The Communist countries have been net exporters of about 1 million barrels a day (mbd) of oil to the West," by 1985, "the Soviet Union and Eastern Europe will require a minimum of 3.5 mbd of imported oil. ... At worst, slumping production could lead to import requirements as large as 4.5 mbd."³ The CIA reasons that because the OPEC countries will already be earning more than they can spend, the oil producers will be unable or unwilling to expand their supply capabilities to satisfy these augmented demands.

While few would argue that sooner or later the Soviet Union will find itself short of oil, the CIA reports are open to criticism on several levels. They seem to neglect important aspects of economic analysis. How will the Soviet Union pay for these 3.5 to 4.5 mbd? If they should find it necessary to come into the market with the predicted demand, what will the price be? What effect will the price have on the Soviets' desire to import and export? What is the size of the estimate of Soviet reserves? Will the use of Western technology change the CIA prediction?

I. Economic Analysis

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As the CIA itself points out, 40% of the hard-currency earnings of the Soviet Union are derived from the sale of petroleum.⁴ Actually, the figure for 1976 was probably closer to 45-50%. This means that, if the Soviet Union ceases to export, it will lose its main source of hard currency. Indeed, the Soviet Union is counting on its petroleum exports to reduce the foreign debt incurred because of the 1972-73 and 1975-76 grain purchases. Petroleum brought in close to \$2.6 billion in 1975, compared to \$700 million for timber, the second largest income earner. In 1976, natural gas probably became the second or third largest source of hard currency, but it is unlikely to earn more than \$1 billion in 1977.

Even at its present levels of petroleum exports, the Soviet Union has been running a hard-currency deficit of close to \$3 billion. This was an improvement over 1975, when the deficit was about \$4 billion. Presumably the trade deficit will continue to diminish if the 1977 harvest is as good as the 1976 harvest. But if the Soviet Union finds itself unable to export petroleum or unable to discover some substitute export commodities, it will not only lack the wherewithal to pay off its past debt, but also the cash to pay for the massive oil imports projected by the CIA. It is true that the Soviet Union has been able to obtain relatively small oil imports on a barter basis from Iraq, Libya, and some of the other OPEC nations, but unless there is a radical alteration in the present political and economic conditions, it is hard to see how the Soviets can induce the OPEC producers to part with the large quantities of petroleum the CIA predicts the Soviets will require. The need for and the absence of hard currency by the USSR is a major flaw in the CIA reasoning.

For the sake of argument, however, let us assume that the Soviet Union, through some windfall does find the cash to import OPEC petroleum, even on a

small scale. Any change the Soviet status from an exporter to an importer

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will affect the world price of petroleum. Naturally, the addition of the Soviet demand will push up the price considerably and thereby increase the Soviets' need for an acceptable currency even more than is presently the case. But the higher the price for petroleum, the greater the pressure on the Soviet Union to conserve. As a minimum a higher price will curb the temptation to import, and at best it will stimulate the Soviet Union to find some way to set aside something for exports.

Conceivably, as the world demand continues to grow and the price climbs, the Soviet Union could decide to reduce exports slightly, since like the back-bending supply curve for labor, the Soviets will be able to earn the same amount with a lesser level of exports. Their willingness to export will probably also be affected by their overall need to earn hard currency. Another poor harvest or an increase in the desire for new machinery or technology would further increase the pressure to set up petroleum exports.

Fortunately for the USSR, it has some flexibility with regard to whether or not it consumes its petroleum itself or exports it. The Soviets may not be as wasteful as we are in the United States, but like we, they have vast reserves of other forms of energy. It has large deposits of coal and even larger deposits of natural gas. Indeed the USSR will shortly become one of the world's major, if not the largest exporter of natural gas. Equally important, its environmental lobby has had no impact on the building of nuclear plants. Consequently the Soviet Union is moving very rapidly toward the building of such plants. Atomic energy will soon become an important source of electrical power. The Tenth Five Year Plan calls for the Soviets and the East Europeans to increase the electricity generated by nuclear power to 30 million kilowatts. Towards that

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Oddly enough, while the CIA recognizes the relative abundance of the Soviets' alternative sources of energy, because so much of it is located in remote and hostile areas, the CIA apparently feels the Soviet Union lacks the flexibility to take advantage of this substitutability. Therefore, the CIA usually concludes that there is little the Soviet Union can do to increase petroleum exports to the hard-currency markets. One of the strongest statements of this sort appeared in the CIA publication released in January 1974. "The USSR has little, if any, uncommitted oil from domestic sources with which to expand sales to the West and take advantage of the present price." ⁵ A somewhat similar sentiment was expressed by [redacted] of the CIA in a Joint Economic Committee Report which appeared on June 27, 1973, before the oil embargo and price rise of late 1973. ⁶ Such sentiments may have seemed reasonable at the time, considering that Soviet gross petroleum exports in 1972 had increased by only 2 million tons compared to an increase of almost 5 million tons in 1971. Indeed, net exports (gross exports minus imports) actually fell in 1972 for the first time since the early 1950's. Subsequently, however, net Soviet petroleum exports increased in 1973 by 6 million tons, 7 million tons in 1974, and 12 million tons in 1975. It is likely that they have increased even more in 1976.

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It is true that the tonnage of petroleum diverted to the hard-currency countries fell in 1974, but this can be largely explained by the sudden leap in earnings from the smaller amount of exports. Whereas hard-currency earnings approximated \$600 million in 1972, in the aftermath of the October 1973 price increase, they jumped to \$1.3 billion in 1973 and \$2.5 billion in 1974, despite the drop in the actual tons exported. This virtual doubling of petroleum earnings made it possible for the Soviet Union in 1974 to accumulate one of the largest

hard-currency surpluses in its history. There was no need to export more.

The situation changed radically, however, in 1975. Then, because of the recession, the earning potential of the traditional Soviet exports, such as timber, was adversely affected. Because the Soviet Union had to spend several billion dollars on unanticipated purchases of grain, the Soviets found themselves with another record - this time a deficit of \$3.5 billion. In order to prevent it from rising even higher, the Soviets sharply increased their exports of petroleum to the hard-currency countries. Exports rose from 31 million tons in 1974 to 38 million tons in 1975. With the deficit continuing into 1976, the Soviets once more increased their hard-currency exports by as much as 10 million tons (200,000 bd), the CIA prediction notwithstanding.

Granted, it is indeed difficult to predict future behavior in Soviet petroleum markets. Nonetheless, based on past Soviet behavior, there seems to be strong evidence to indicate that the Soviets are responsive to changes in the market price and export opportunities. This became particularly clear during the oil embargo of 1973-74.⁷ Moreover, they will also use their petroleum to alleviate balance of payment problems. In other words, if they have a serious balance of payments problem, their first response has been to increase exports, although as the balance of payments improves, they may be able to export less. There is good reason to believe this pattern will continue in the future.

II. Reserves

It is much more difficult to challenge the CIA's estimate of Soviet reserves. The Soviet figures are a state secret. Further complicating the effort is the fact that reserves in the United States and in the West are classified differently from those in the Soviet Union. However, because fewer new major Soviet oil fields have been announced recently, (although a major field was discovered

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at Maiskoye in July 1970 near Yamontovskoye, there is good reason to believe that the reserve/production ratio is falling. Yet, that does not necessarily mean that the CIA's gloomy conclusions are correct. As recently as September 1975, a CIA report indicated that the best estimate of Soviet "proved" "reserves in place" totaled about 10 billion tons or 73 billion barrels.

According to the Soviet classification system, that means categories A + B.⁸ As indicated in Table 1, other reserve estimates by other authors, including the United States Geological Survey, range from 5.2 - 7 million tons (38-56 billion barrels) to 13.5 million tons (99 billion barrels) of proven and probable reserves; (Categories A + B + C₁). The CIA estimate of proven reserves was reduced to 36 billion barrels in 1976, but then in 1977, it was lowered again, this time to 30-35 billion barrels.⁹ These continued revisions are apparently due to more than just the drain of current production. It is impossible to postulate what the correct figure may be, but without some more information it is hard to see how the CIA has suddenly arrived at the figures it now wants us to accept.

III. Declining Output

The CIA also warns that in one to four years Soviet output will level off, and then, in another year or two, begin to fall. Similar predictions had been made previously. Some thought production would decline as early as the early 1970's.¹⁰ Certainly, sooner or later output will fall. Indeed, the Soviets have cause for concern, because output in most of their older fields is in fact diminishing. However, thus far this has been more than compensated for by increases in output in relatively new areas of West Siberia.

The CIA warns, however, that pumping at such rapid rates from those new fields is unlikely to continue. Moreover, they argue that most of the untapped reserves are located in cold and hostile regions. This is true; yet it is also

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true that many reports reflect the Soviet Union is not the
Tiumen fields in West Siberia for similar reasons. To the amazement of many,
however, not only are the Soviets pumping almost 35% of their output from the
Tiumen region, but output there in 1976 jumped by almost 30 million tons
(600,000 bd). This accomplishment is all the more impressive when it is
remembered that oil was first discovered at Samotlor only in 1960. Only eight
years later the first commercial well there was opened. Moreover, the Soviets
had to develop their own techniques for operating in this new and extreme environ-
ment of permafrost all year long - with sub-zero weather in the winter and heat,
swamp, and mosquitos in the summer. It helps, of course, that the Soviets do
not have to trouble themselves with the same kind of environmental safeguards
that have bedeviled our oil companies in Alaska. It is also necessary to
remember that the Soviets are used to working under extreme conditions, par-
ticularly in frigid zones, that most Americans would find intolerable. For
that reason it is unwise to assume that new deposits in equally or more hostile
regions of the Soviet Union will be unworkable or will come slowly.¹¹ Nor
should it be forgotten that despite the remoteness and difficult working con-
ditions of many of these areas, each price increase in the world market makes
feasible many projects that previously may have been unprofitable.

.IV. Technology

Finally, a key assumption in the CIA report is that Soviet technology is
unable to cope with the difficult exploration, drilling, and pumping conditions
that exist in the USSR. After referring to the difficulty of developing petro-
leum in places such as the Arctic, Kamchatka, and Sakhalin's off-shore regions,
and the East Siberian lowlands, and in particular the deep wells in the Caspian,
the CIA asserts that "the USSR lacks the equipment and experience necessary to

undertake a deep drilling program without extensive Western help." ¹² Again, the CIA is correct as far as it goes. Soviet turbodrill rigs are highly inefficient for the deep drilling that is becoming increasingly necessary in the USSR. Similarly many of the drilling bits used in the Soviet Union are inefficient. The CIA is also correct when it argues that the Soviet Union is faced with the necessity of pumping out increasing quantities of water with its petroleum. But conceding all these points does not necessarily lead to the conclusion that output will fall. Certainly new production will be more costly. It will also necessitate significant infusion of foreign technology. As export prices rise, however, the purchase of foreign technology becomes all the more attractive. Indeed, the Soviets for some time have been active purchasers of Western petroleum technology. They have bought millions of dollars worth of pipe, large numbers of semi-submersible pumps, and off-shore oil rigs. They are negotiating for the purchase of drill bit and other petroleum equipment factories. While all of this will be expensive, it is by no means an unsurmountable obstacle.

In sum, there seems to be no doubt that sooner or later the Soviet Union will find itself short of petroleum, just like most of the other industrialized countries in the world. However, there is very good reason to believe that it will be later than the CIA indicates, and that the Soviets will not be able to solve their domestic shortages by massive imports of petroleum.

PETROLEUM RESERVE ESTIMATES FOR THE SOVIET UNION
PROVEN AND PROBABLE (A + B + C₁)

<u>Source</u>	<u>Billion Tons</u>	<u>Billion Barrels</u>
¹ Congressional Research Service, Library of Congress, CRS-1 IB75059, Update, February 25, 1976	5.2-7	38-56
² United Nations, <u>Statistical Yearbook</u> , 1971, Volume 23, New York, 1972, p. 181	8.1	59
³ Central Intelligence Agency, <u>Research Aid Soviet Long-Range Energy Forecasts</u> , Washington, D.C., September 1975, p. 10	10.0	73
⁴ Leslie Dienes, "Energy Self-Sufficiency in the Soviet Union," <u>Current History</u> , August 1975, p. 47	10.3	75
⁵ J. H. Cheshire and Miss C. Huggett, "Primary Energy Production in the Soviet Union: Problems and Prospects," <u>Energy Policy</u> , September 1975, p. 229.	10.5	77
⁶ <u>Oil and Gas Journal</u> , December 1975	10.9	80
⁷ <u>International Petroleum Encyclopedia</u> , Tulsa, Oklahoma, The Petroleum Publishing Company, 1975, pp. 203 and 297	11.3	83
⁸ United States Geological Survey for 1973	13.5	99
⁹ Jeremy Russell, <u>Energy as a Factor in Soviet Foreign Policy</u> , London, Saxon House--Lexington Books, 1976, p. 40	14.0	103
¹⁰ United States Geological Survey, <u>Summary of Petroleum and Selected Mineral Statistics for 120 Countries, Including Offshore Areas</u> , Joseph P. Albers et al., Washington, D.C., United States Government Printing Office, 1973, pp. 142-143	13.5	99

Footnotes

- (1) Central Intelligence Agency, The International Energy Situation: Outlook to 1985, April, 1977, ER-77-10240 U; Central Intelligence Agency, Prospects for Soviet Oil Production, April 1977, ER-77-10270.
- (2) CIA, The International Energy Situation, page 1.
- (3) ibid., pgs. 12, 13.
- (4) CIA Prospects, op.cit., p. 9.
- (5) Central Intelligence Agency, Research Aid: The Soviet Economy in 1973. Performance, Plans, and Implications, A(ER) 74-62, July 1974.
- (6) Joint Economic Committee, Soviet Economic Prospects for the Seventies, United States Government Printing Office, Washington, D.C., June 27, 1973, p. 287.
- (7) Marshall I. Goldman, "The Soviet Union," "The Oil Crisis: In Perspective." Daedalus, Fall 1975, p. 129.
- (8) Central Intelligence Agency, Research Aid: Soviet Long-Range Energy Forecasts, September 1975, A(ER) 75-71, p. 10.
- (9) Central Intelligence Agency, Research Aid: Handbook of Economic Statistics, 1976, p. 78; Central Intelligence Agency, Prospects, op.cit., p. 3.
- (10) Marianna Slocum, "Soviet Energy: An International Assessment," Technology Review, October/November 1974, p. 17; ASTE (Association for the Study of Soviet-Type Economics), Bulletin, Vol. XII, No. 2, Fall, 1970, pgs. 11-13.
- (11) Central Intelligence Agency, Prospects, op.cit., April 1977, p. 3.
- (12) ibid., p. 8.

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EXECUTIVE SECRETARIAT

Routing Slip

TO:		ACTION	INFO	DATE	INITIAL
1	DCI		X		
2	DDCI		X		
3	D/DCI/IC				
4	DDS&T				
5	DDI	X			
6	DDA				
7	DDO				
8	D/DCI/NI				
9	GC				
10	LC				
11	IG				
12	Compt				
13	D/Pers				
14	D/S				
15	DTR				
16	Asst/DCI				
17	AO/DCI				
18	C/IPS				
19	DCI/SS				
20	D/EE0				
21					
22					
SUSPENSE		25 May 1977 Date			

Remarks: Please prepare analysis and response for DCI signature.



D/ Executive Secretary

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HARVARD UNIVERSITY

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RUSSIAN RESEARCH CENTER

171-4189/2

6.1.2.1

5 May 77

EDWARD L. KEENAN, *Director*

MARSHALL I. GOLDMAN, *Associate Director*

VLADIMIR I. TOUMANOFF, *Associate Director*

10 May 1977

ARCHIBALD CARY COOLIDGE HALL
1737 CAMBRIDGE STREET
CAMBRIDGE, MASSACHUSETTS 02138
(617) 495-4037

Admiral Stansfield Turner
Director
Central Intelligence Agency
Washington, D.C. 20505

Dear Admiral Turner:

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I have enclosed a somewhat longer analysis of the two reports. Naturally I would welcome any comments that anyone has about them.

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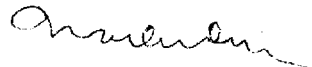
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MIG:rdb

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In April 1977, the Central Intelligence Agency released two new reports which served as the underpinning for President Carter's statement on the need for energy conservation.¹ While few would dispute the need for energy conservation, there is good reason to challenge the CIA's specific findings about the availability and demand for petroleum in the USSR.

The CIA argues that by 1985 the availability of world petroleum supplies will become decidedly more limited, because the "USSR will change from an exporter to a substantial importer of oil."² Whereas "The Communist countries have been net exporters of about 1 million barrels a day (mbd) of oil to the West," by 1985, "the Soviet Union and Eastern Europe will require a minimum of 3.5 mbd of imported oil. ... At worst, slumping production could lead to import requirements as large as 4.5 mbd."³ The CIA reasons that because the OPEC countries will already be earning more than they can spend, the oil producers will be unable or unwilling to expand their supply capabilities to satisfy these augmented demands.

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II. Reserves

It is much more difficult to challenge the CIA's estimate of Soviet reserves. The Soviet figures are a state secret. Further complicating the effort is the fact that reserves in the United States and in the West are classified differently from those in the Soviet Union. However, because fewer new major Soviet oil fields have been announced recently, (although a major field was discovered

at Maiskoye in July 1976 (near Maikanskyoye) there is good reason to believe that the reserve/production ratio is falling. Yet, that does not necessarily mean that the CIA's gloomy conclusions are correct. As recently as September 1975, a CIA report indicated that the best estimate of Soviet "proved" "reserves in place" totaled about 10 billion tons or 73 billion barrels. According to the Soviet classification system, that means categories A + B.⁸ As indicated in Table 1, other reserve estimates by other authors, including the United States Geological Survey, range from 5.2 - 7 million tons (38-56 billion barrels) to 13.5 million tons (99 billion barrels) of proven and probable reserves; (Categories A + B + C₁). The CIA estimate of proven reserves was reduced to 36 billion barrels in 1976, but then in 1977, it was lowered again, this time to 30-35 billion barrels.⁹ These continued revisions are apparently due to more than just the drain of current production. It is impossible to postulate what the correct figure may be, but without some more information it is hard to see how the CIA has suddenly arrived at the figures it now wants us to accept.

III. Declining Output

The CIA also warns that in one to four years Soviet output will level off, and then, in another year or two, begin to fall. Similar predictions had been made previously. Some thought production would decline as early as the early 1970's.¹⁰ Certainly, sooner or later output will fall. Indeed, the Soviets have cause for concern, because output in most of their older fields is in fact diminishing. However, thus far this has been more than compensated for by increases in output in relatively new areas of West Siberia.

The CIA warns, however, that pumping at such rapid rates from those new fields is unlikely to continue. Moreover, they argue that most of the untapped reserves are located in cold and hostile regions. This is true; yet it is also

TABLE

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 PETROLEUM RESERVE ESTIMATES FOR THE SOVIET UNION
 PROVEN AND PROBABLE (A + B + C₁)

<u>Source</u>	<u>Billion Tons</u>	<u>Billion Barrels</u>
¹ Congressional Research Service, Library of Congress, CRS-1 IB75059, Update, February 25, 1976	5.2-7	38-56
² United Nations, <u>Statistical Yearbook</u> , 1971, Volume 23, New York, 1972, p. 181	8.1	59
³ Central Intelligence Agency, <u>Research Aid Soviet Long-Range Energy Forecasts</u> , Washington, D.C., September 1975, p. 10	10.0	73
⁴ Leslie Dienes, "Energy Self-Sufficiency in the Soviet Union," <u>Current History</u> , August 1975, p. 47	10.3	75
⁵ J. H. Cheshire and Miss C. Huggett, "Primary Energy Production in the Soviet Union: Problems and Prospects," <u>Energy Policy</u> , September 1975, p. 229.	10.5	77
⁶ <u>Oil and Gas Journal</u> , December 1975	10.9	80
⁷ <u>International Petroleum Encyclopedia</u> , Tulsa, Oklahoma, The Petroleum Publishing Company, 1975, pp. 203 and 297	11.3	83
⁸ United States Geological Survey for 1973	13.5	99
⁹ Jeremy Russell, <u>Energy as a Factor in Soviet Foreign Policy</u> , London, Saxon House--Lexington Books, 1976, p. 40	14.0	103
¹⁰ United States Geological Survey, <u>Summary of Petroleum and Selected Mineral Statistics for 120 Countries, Including Offshore Areas</u> , Joseph P. Albers et al., Washington, D.C., United States Government Printing Office, 1973, pp. 142-143	13.5	99

true that many skeptics felt the Soviet Union would be unable to exploit the Tiumen fields in West Siberia for similar reasons. To the amazement of many, however, not only are the Soviets pumping almost 35% of their output from the Tiumen region, but output there in 1976 jumped by almost 30 million tons (600,000 bd). This accomplishment is all the more impressive when it is remembered that oil was first discovered at Samotlor only in 1960. Only eight years later the first commercial well there was opened. Moreover, the Soviets had to develop their own techniques for operating in this new and extreme environment of permafrost all year long - with sub-zero weather in the winter and heat, swamp, and mosquitos in the summer. It helps, of course, that the Soviets do not have to trouble themselves with the same kind of environmental safeguards that have bedeviled our oil companies in Alaska. It is also necessary to remember that the Soviets are used to working under extreme conditions, particularly in frigid zones, that most Americans would find intolerable. For that reason it is unwise to assume that new deposits in equally or more hostile regions of the Soviet Union will be unworkable or will come slowly.¹¹ Nor should it be forgotten that despite the remoteness and difficult working conditions of many of these areas, each price increase in the world market makes feasible many projects that previously may have been unprofitable.

.IV. Technology

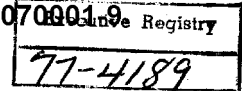
Finally, a key assumption in the CIA report is that Soviet technology is unable to cope with the difficult exploration, drilling, and pumping conditions that exist in the USSR. After referring to the difficulty of developing petroleum in places such as the Arctic, Kamchatka, and Sakhalin's off-shore regions, and the East Siberian lowlands, and in particular the deep wells in the Caspian, the CIA asserts that "the USSR lacks the equipment and experience necessary to

undertake a deep drilling program without extensive Western help." 12 Again, the CIA is correct as far as it goes. Soviet turbodrill rigs are highly inefficient for the deep drilling that is becoming increasingly necessary in the USSR. Similarly many of the drilling bits used in the Soviet Union are inefficient. The CIA is also correct when it argues that the Soviet Union is faced with the necessity of pumping out increasing quantities of water with its petroleum. But conceding all these points does not necessarily lead to the conclusion that output will fall. Certainly new production will be more costly. It will also necessitate significant infusion of foreign technology. As export prices rise, however, the purchase of foreign technology becomes all the more attractive. Indeed, the Soviets for some time have been active purchasers of Western petroleum technology. They have bought millions of dollars worth of pipe, large numbers of semi-submersible pumps, and off-shore oil rigs. They are negotiating for the purchase of drill bit and other petroleum equipment factories. While all of this will be expensive, it is by no means an unsurmountable obstacle.

In sum, there seems to be no doubt that sooner or later the Soviet Union will find itself short of petroleum, just like most of the other industrialized countries in the world. However, there is very good reason to believe that it will be later than the CIA indicates, and that the Soviets will not be able to solve their domestic shortages by massive imports of petroleum.

Footnotes

- (1) Central Intelligence Agency, The International Energy Situation: Outlook to 1985, April, 1977, ER-77-10240 U; Central Intelligence Agency, Prospects for Soviet Oil Production, April 1977, ER-77-10270.
- (2) CIA, The International Energy Situation, page 1.
- (3) ibid., pgs. 12, 13.
- (4) CIA Prospects, op.cit., p. 9.
- (5) Central Intelligence Agency, Research Aid: The Soviet Economy in 1973. Performance, Plans, and Implications, A(ER) 74-62, July 1974.
- (6) Joint Economic Committee, Soviet Economic Prospects for the Seventies, United States Government Printing Office, Washington, D.C., June 27, 1973, p. 287.
- (7) Marshall I. Goldman, "The Soviet Union," "The Oil Crisis: In Perspective." Daedalus, Fall 1975, p. 129.
- (8) Central Intelligence Agency, Research Aid: Soviet Long-Range Energy Forecasts, September 1975, A(ER) 75-71, p. 10.
- (9) Central Intelligence Agency, Research Aid: Handbook of Economic Statistics, 1976, p. 78; Central Intelligence Agency, Prospects, op.cit., p. 3.
- (10) Marianna Slocum, "Soviet Energy: An International Assessment," Technology Review, October/November 1974, p. 17; ASTE (Association for the Study of Soviet-Type Economics), Bulletin, Vol. XII, No. 2, Fall, 1970, pgs. 11-13.
- (11) Central Intelligence Agency, Prospects, op.cit., April 1977, p. 3.
- (12) ibid., p. 8.



Washington, D.C. 20505

5 MAY 1977

Dear Professor Goldman,

I read and enjoyed your article on "Oil and Credibility" in the 28 April edition of The New York Times. By now you will have received your copies of two CIA studies which have been released on this question.

Being new as Director of the CIA, I am most anxious to insure our credibility. In part this comes from the way we do our business; in part it comes from the substance of the work we produce. Your article indicates some criticism on the latter score. I would be most interested in your detailed points of criticism once you have had a chance to read the studies.

Your article and a number of others that have appeared in the media tend to focus on the energy reserve base. From what I understand of our analysts' view, they do not see any major increases in Soviet oil production from new fields no matter how many barrels of oil are buried somewhere and under Soviet control, and we agree they are considerable. As detailed in our report on the prospects for Soviet oil, the USSR's limited drilling capacity is a major factor in this conclusion. Hence, we do not concur with your point that the fact that the Soviets have large oil reserves means that they can make their target for 1980 or, in fact, avoid a downturn in production during the next several years. Incidentally, taking definitional differences into account, our analysts think it is necessary to scale down the 81 billion barrels of reserves you cite to make it comparable with proved reserve figures for the United States.

(FOR THE DIRECTOR E-1.2.1)

I would agree with you that should the Soviet Union turn to a net importer of oil rather than an exporter, they will have very serious problems with hard currency earnings. In fact, it is almost inconceivable that they could finance this level of imports, and they will no doubt go to great lengths to avoid doing so. Our study was not intended to predict what the Soviets would in fact do, simply to describe the magnitude of the problem that the USSR and Eastern Europe together will face by 1985 if the trends now in train continue. This is much the same approach we used in the 1985 worldwide energy paper.

We are now in the process of analyzing the options available to the Soviets to conserve energy and to reduce import demand. Hopefully, an unclassified paper will be available within a month or so. I will send you a copy at that time and look forward to any comments you may care to offer.

Yours sincerely,

/s/ Stansfield Turner

STANSFIELD TURNER
Admiral, U.S. Navy

Professor Marshall I. Goldman
Wellesley College
Wellesley, Massachusetts 02181

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28 APRIL 1977

ARTICLE APPEARING
ON PAGE A-29

Oil and Credibility

By Marshall I. Goldman

CAMBRIDGE, Mass.—President Carter's call for energy conservation comes none too early. While some may argue whether it will be 1983 or 1987 when petroleum demand exceeds supply, most authorities agree that if demand continues to grow there will indeed be a shortage.

Despite agreement over the ultimate conclusion, there is a good deal of public skepticism about the actual dimensions of the problem. Because of past warnings that occasionally have proved to be premature or false, it is vitally important that the President and his advisers not exaggerate. Unfortunately, Mr. Carter seems to have done just that when he cited the Central Intelligence Agency study of the demand and supply of energy in 1985. The general conclusion is not wrong, but parts of the analysis appear to be incorrect. They could affect the public's attitude towards the whole report's credibility.

In particular, the report predicts that by 1985 the Soviet Union and Eastern Europe will need to import 3.5 million to 4.5 million barrels of oil a day and that this will intensify demand pressures on the rest of us.

Predicting Soviet oil output by 1985 is risky. Estimates of Soviet petroleum reserves are a state secret. Consequently, foreigners can only guess about Soviet production potential by projecting what comparable geological formations elsewhere in the world would yield. Such estimates vary widely, but 81 billion barrels is a plausible guess. If correct, that means the Russians have the potential not only to maintain their existing output but to fulfill their target for 1980, which calls for an increase in output of 5.4 percent a year.

Output in several Soviet oil fields in 1976 was less than that of 1975, but output from the gigantic Tyumen fields in western Siberia more than made up for that. The C.I.A. assumes that the Tyumen fields cannot continue to provide such large-scale increments in output yearly. However, the Russians have indicated that there are potentially rich deposits elsewhere and in other geological strata. Moreover, the Russians have not, until now, been particularly efficient in oil recovery and off-

in 1973. But an increase in prices serves to make economically feasible what before was considered unprofitable. Certainly, if the C.I.A.'s predictions about shortages elsewhere in the world prove to be correct, there is likely to be another significant price increase ahead. This will mean that the Russians will have added incentive not only to work deposits that might now be unprofitable but to curb domestic consumption in order to take advantage of the higher world prices.

The Russians and even the East Europeans have some leeway to do this since the Soviet Union has coal and unusually large deposits of natural gas it can substitute. It can also increase its use of nuclear power.

The Soviet Union not only has the incentive to conserve in order to divert petroleum to this high-priced market, but will be sorely pressed if it has to import. The C.I.A. scenario implies that the Soviet Union will not be able to export petroleum. However, since petroleum exports in 1976 accounted for about 50 percent of the Soviet Union's hard-currency earnings, it is hard to see where the Soviet Union will find the wherewithal to import, particularly if the real price of petroleum continues to climb.

The C.I.A. is saying, therefore, that not only will the Soviet Union and its allies have to import 3.5 to 4.5 million barrels a day, but because it will not be able to export its current one million barrels a day to hard-currency countries, the overall impact on the world market will be a drain of 4.5 to 5.5 million barrels a day. This, in turn, seems to imply that the Soviet five-year-plan target for 1980 of 12.8 million barrels a day will not be fulfilled and that such production cannot be sustained into 1985.

So far, however, the Russians are keeping up with their targets. Even if they produce no more in 1985 than they project for 1980, that should still be enough to allow them and their allies to increase their consumption by 50 percent a year for the next eight years, sustained by only one million barrels a day of imports. Even then, this implies not only no curbing of domestic demand and no new significant oil discoveries, but an abundance of hard currency to pay for the higher-priced world petroleum of 1985.

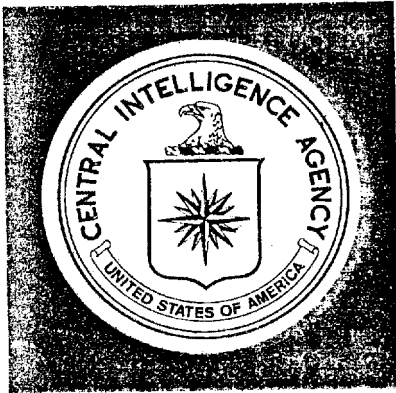
Again, the issue is not whether the Soviet Union will ever run out of oil much longer than the C.I.A. says before the Soviet Union becomes the cause of the tightened market.

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Prospects for Soviet Oil Production

ER 77-10270
April 1977



*The International Energy Situation:
Outlook to 1985*

ER 77-10240 U
April 1977

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MEMORANDUM FOR: DCI Executive Secretary

Executive Registry

77-4189/1

Ben

I have attached a rewritten letter from the Director to Professor Goldman. The first draft was really quite good. I simply fleshed it out a bit. Please note that we have already sent Professor Goldman copies of the two CIA papers.



Deputy Director
Economic Research

Date 4 May 77

FORM 5-75 101 USE PREVIOUS EDITIONS

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(~~CONFIDENTIAL~~ *E-1.2.1*)

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EXECUTIVE SECRETARIAT

Routing Slip

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ILLINOIS WESLEYAN UNIVERSITY / BLOOMINGTON, ILL. 61701

DEPARTMENT OF POLITICAL SCIENCE

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77-8146
✓

June 24, 1977

Admiral Stansfield Turner
 Director of Central Intelligence
 Central Intelligence Agency
 Washington, D. C. 20505

Dear Admiral Turner:

I last brought students to Washington for a course on foreign policy formation in January, 1976; I presently am planning a similar course for students at Illinois Wesleyan University, for the week of January 16-20, 1978. In these "travel courses" students spend about two weeks on campus studying the basic aspects of the subject, and then travel to the place where the activity studied is taking place. They visit the activity, listen to briefings or discussion, ask questions, and assimilate the practical aspects with the theoretical aspects previously studied. Preregistration for the course indicates that about fifteen students will be taking the course next year. I recently noted in the news that the Central Intelligence Agency was planning to have guided tours. In the hope that you are also considering giving briefings to groups of students by next January, I make this request.

During the week of January 16-20, 1978, I would like my students briefed on the role of intelligence in foreign policy making by an employee of your agency. In the past we have been accustomed to having ninety-minute briefing sessions with a forty-five minute formal presentation, followed by forty-five minutes of students' questions. So far, except for the morning of Tuesday, January 17, our schedule is open. If you would designate a time and place for us to be present, when a ninety minute session would be possible, we will be there. If by chance the time which you select has already been chosen, I will write you at once, to arrange another time.

We will be interested in learning what the role of intelligence in foreign policy is, and how the C. I. A. participates: in embassies and with overseas missions, with executive departments (particularly State and Defense), and with the National Security Council. If you choose, we would be interested in specific policies and situations.

If we would be able to receive a briefing by the Central Intelligence Agency, my students and I would be most appreciative. Thank you for considering our request. I look forward to your reply.

Very truly yours,

REGISTRY FILE E-1.2.1 Robert G. Leh

Robert G. Leh